



Ø BEAT



COLORADO SPRINGS,
COLORADO

INSIDE THIS ISSUE:

APRS in Space!	Page	10
Committee Chairpersons	Page	2
Dits and Bits	Page	8
Meeting Minutes	Pages	3,4
OM/YL Lunch Bunch	Page	9
Radio Exams	Page	2
Words from the President	Page	4

JANUARY 1996



Amateur Radio News Service



Pikes Peak Radio Amateur Association, Inc.
P. O. Box 16521
Colorado Springs, Colorado 80935

FIRST CLASS MAIL

1 Renew before 08/31/96
ROBERT ROLLER
WB7WHT
4846 HERNDON CIR.
COLO. SPGS., CO 80920



Ø BEAT



Pikes Peak Radio Amateur Association Officers and Directors

President—	Rob Roller	WB7WHT	4846 Herndon Circle	80920	282-0204
Vice-President—	Doug Moloney	WBØMHP	3817 Vaquero Circle S.	80918	690-2767
Secretary—	Warren Hickey	WØYNE	12886 Tia Lane	80908	496-0471
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Ø-Beat Editor—	Jeff Boyes	NØJLH	2826 E. Bijou Street	80909	633-6650
Board Member—	Ron Deutch	NKØP	4306 Ridgeland Drive	80918	693-3362
Board Member—	Jeff Ryan	NØWPA	6721 Northface Lane	80919	260-6826
Board Member—	Gloria Ryan	NØZFX	6721 Northface Lane	80919	260-6826
Board Member—	Harry Russell	NØSFP	11710 Tracy Lane, Peyton	80631	749-0244

Ø-BEAT is published monthly in the interest of the members of the Pikes Peak Radio Amateur Association, Inc., PO Box 16521, Colorado Springs, Colorado 80935. For membership and subscription information see the last page of this publication. The Pikes Peak Radio Amateur Association meets monthly (the second Wednesday of each month) at the Disabled American Veterans Hall, Chapter 26, 6880 Palmer Park Blvd. at 7 PM.

Deadline for submission of articles or advertisements is the 20th of each month. Submissions are accepted in any form, however electronic submission (on disk, or via the electronic mail) is preferred. Articles should be sent directly to the Ø-BEAT Editor. Permission is granted to reprint articles provided credit is given to both the author and this publication.

Monthly advertising rates: Full page \$48; half page \$24; quarter page \$12; business card \$6. These rates are billed quarterly. Send your advertisement requests and payments to: PPRAA, PO Box 16521, Colorado Springs, Colorado 80935.

Committee Chairpersons & Other Club Contacts

Activity	Doug Moloney	590-2757
Auditing		
Historian		
Interference	Bill Petty	591-2118
Membership	Les Borst	634-3995
Programs	Doug Moloney	590-2757
Publicity	Aaron Pelouze	282-9715
Public Service	Mike Stansberry	636-1290
Swapfest	Harvey Hunter	597-8964
Technical Instruction	Al Bailey	597-8514
Trailer Custodian	Harry Russell	749-0244
VE Testing	Erik Mugele	596-5345
Ø-Beat Editor	Jeff Boyes	633-6650
ARES Liaison	Mike Stansberry	636-1290
CCARC Liaison	Cory Nelson	528-6696
RACES Liaison	Doug Jarmuth	520-0456
Skywarn Liaison	Steve Westby	570-1070

Reminder — General Membership Meeting

The next General Membership Meeting of the PPRAA will be on the second Wednesday of this month at the Disabled American Veterans Hall, 6880 Palmer Park Blvd. The meeting will start at 7 PM.

Quiet! EXAM IN PROGRESS



Radio Exams

Radio exams sponsored by the PPRAA are held on the 2nd Saturday of February, April, June, August, October, and December. Testing takes place at 9 A.M. at:

Denver Technical College
225 South Union
Colorado Springs

Everyone is seated on a walk-in basis. Those wishing to take an examination should bring the following items:

1. \$5.90 (preferably a check or money order made out to ARRL/VEC) for any exam other than element 1A or 2.
2. Picture identification.
3. A copy of your current amateur radio license, and/or a copy of any examination credit you have as well as the signed original. We keep the copies.
4. A pen, pencils, and a calculator if you need one.

If you have any further questions please call Erik Mugele, KGØXE at 596-5345. Please do not call Denver Technical College.

**General Membership Meeting
Minutes
December 13, 1995**

The general membership meeting was opened at 7:00 p.m. by the President Rob Roller, WB7WHT, upon determining a quorum of the membership was present.

The minutes of the Nov 8, 1995 meeting, as published in the Ø-Beat, were approved as written.

Committee Reports:

A.R.E.S. Liaison: Jeff, NØWPA, had nothing to report.

Publicity: Aaron, KD6FLM, asked if any of the members had thoughts on Publicity that they would get with him during the break.

Public Service: No activities were pending.

Interference: Bill Petty, NØHJX, had no new interference incidents.

Ø-BEAT: Everyone was reminded that the deadline for the Ø-Beat is the 20th of each month.

Programs: Doug, WBØMHP, announced the January club meeting topic will be Home Brew Night. Everyone is invited to submit some homebrew object. There will be award classes for all experience levels.

Club Trailer: No change.

Education: Al Bailey announced another successful Novice and Tech Class with over 20 people obtaining new licenses. A class for the General license will start soon at the Tesla Society building.

Swapfest: Harvey, WA3EIB, briefed the members on the location, Liberty High and the May 18th date that had been tentatively set. He already had some of the permits in hand. Harv is looking for a few good people to help this year.

Old Business:

Election of an association Treasurer was held. Congratulation to Mary, KBØSHT, who is the new Treasurer.

New Business:

Rob presented an award to Steve Westby, WB7VHR, in recognition of outstanding tenure as president of the PPRAA.

Mike Proctor presented an ARRL First Contact Award to John Auer, KBØUMU. Congratulations John.

The Hammy Award was presented by Jeff, NØWPA, on behalf of Kalani, KBØODK, to Rob Roller, WB7WHT. Congratulations Rob.

Next Board meeting will be held at Rob's, WB7WHT home on Monday, Dec 18th at 7:00 p.m. If you intend to attend please let Rob know.

The meeting was adjourned and Christmas party activities followed.

Respectfully submitted by Warren, WØYNE, Secretary

**Board of Directors Meeting
Minutes
December 18, 1995**

The Board Meeting was opened at 7:00 p.m. by the President, Rob, WB7WHT at his home. Members present were Doug, WBØMHP, Warren, WØYNE, Jeff, NØWPA, Gloria, NØZFX, Ron, NKØP, Harry,

NØSFP, Mary, KBØSHP, Aaron, KD6FLM, and Harv WA3EIB.

Old Business:

The board discussed the monthly programs based on the brainstorming session that Doug had conducted at a previous membership meeting. Our January meeting will be Homebrew night. There will be several categories. The Board will select the finalists, then the membership will select the first and second place winners in each category. Future meetings might include a session on the ARRL organization.

Aaron, KD6FLM, contacted the Gazette for announcements of our activities.

The state returned a check for \$231 that we had sent to them for unspent revenue from a prior year swapfest. It was moved and seconded that the money be deposited in the general fund as a refund. The motion passed.

It was moved and seconded that \$1.86 be authorized to cover an increase in price of the plaque given to Steve. Motion passed.

Doug asked about the status of the Association equipment audit. It is still pending. It was decided that a firm date of March 15 needed to be established to complete the audit. The chairman will contact the equipment custodian and give him the date.

Harv, WA3EIB, the swapfest chairman, spoke our planning process. It seems that because of School Board changes, there will be "No Smoking" allowed on the School property. It will be up to us to police

the area. The date of the Swapfest was discussed. Board members presented the pros and cons of having it on the same date as Dayton. Harv presented another option in July. It was moved and seconded that the Swapfest be held on the 20th of July. The motion passed. Harv will contact the school board to see if that day is acceptable to them.

The general membership monthly meeting format was again discussed. Many good ideas were on the table. Rob will incorporate some of the ideas at the next meeting.

New Business:

Harry, NØSFP, suggested that this being our 45th year we should put out a commemorative issue of Ø-Beat. After a discussion period, a decision was made to form a commemorative committee. Ron, NKØP, volunteered to be a member of this committee. Although chartered 45 years ago our roots appear to go back to the last thirties. Anyone with any early history or pictures of the PPRAA activities should contact Ron or a board member.

A motion was made by Doug and seconded by Harry to spend up to \$40 on a gift for Bob to thank him for the contributions of parts which have generated revenue for PPRAA.

A motion was made and passed to present the Hammy of the year award at the Feb. meeting. Members wishing to recommend a deserving member should forward them to a member of the Board.

A field day site needs to be selected. Field day is June 22-23. It is does not appear that we will be able to get

the Family Camp grounds at the Academy anymore. Several other sites were suggested. A field day committee needs to be formed to develop a plan.

Aug 18 was tentatively set as the date for the Association Picnic. A Picnic committee needs to be formed at the next general membership meeting. Anyone interested in being on the committee should contact Rob.

Being no further business the meeting was adjourned.

Respectfully submitted by Warren, WØYNE, Secretary

Ø-Beat Trivia

Seventeen Years Ago...Notable club activities (as reported in the December 1975 Ø-Beat) were...

Hams helped find a small aircraft that was forced to land about 30 miles East of town by bad weather.

The Christmas Dinner was held at the Grain & Grape on Dec. 16th.

The newly elected officers were:

President - Doug Moloney

Vice Pres - Art Mayer

Secretary - Loma Schlueter

Treasurer - Dave Reese

Ø-Beat Editor - Dave Allen

Words from the President:

WB7 Who Has Time ...

anymore for all the things that we do? I know I'm about at the limit of spare time I have. Fortunately Mary Salus, KBØSHP, has decided to give some of her spare time (I didn't ask if she had any) and take over as your treasurer for the PPRAA. Thanks a lot for the help, Mary. Mary was

elected to the position at the Christmas Party.

Speaking of time, this year's hamfest is suffering from several problems associated with time. As you're aware, the Dayton Hamvention, which has normally been held at the end of April has decided to move their date to the same weekend in May that we normally hold the PPRAA hamfest. A number of PPRAA members approached several board members regarding our decision to keep the PPRAA hamfest on the same date. So we started looking into some options. Since then another problem has arisen. District 20 wants to increase (as in DOUBLE) the fees charged for renting out their facility. As of the time I'm writing this, we haven't made a decision on the location or the date of the hamfest. Harvey Hunter, WA3EIB, your Hamfest Chairman, is working hard on a solution and will update you when a decision is made. Stay tuned.

Along those same lines (time lines, that is) I mentioned in last month's Ø-Beat that the PPRAA was incorporated thirty years ago. That's quite a while. Well, Ron Deutsch, NKØP, one of your board members, looked up some more history and found that the PPRAA came into existence in November 1951! So that makes us 44 years old now! Anyway, we thought of at least one idea to celebrate our thirtieth (incorporated) year. You'll hear more as it develops.

And don't forget Jeff and Renay Boyes, NØJLH and KAØROY respectively, your Ø-Beat Editors, are looking for your input to revisit great moments in PPRAA history. I know there are some great moments out there - look at all the great people we have! Give Jeff or Renay a call right away.

Now back to the main theme - time. I'd like to get all of you to donate some time this year. We've got a hamfest that can be the best one yet. But it'll need some of your time. We've got a Field Day coming up in June that can also be a great time. But it'll need some of your time. And there'll be plenty more to do throughout the year. But they'll all need some of your time. So pull out your Day-Timers and start managing all that spare time..

Rob / WB7WHT

Upcoming Swapfests

January 13th

Northern Colorado ARC - Winter Superfest. 9 a.m. at the Larimer County Fairgrounds, Railroad Ave., Loveland.

Talk-in: 145.115(-) and 146.52(s).

Admission: \$3.00.

Sellers' tables: \$8.00 (includes one admission.)

General Info: Mike Robinson, AA0UB, 970-282-1167.

Tables: Jeanene Gage, N0YHY, 970-351-7327

VE Exam Info: Steve Henry, AA0VB, 970-226-2817.

April 6th

Longmont ARC - LARCfest
Boulder County Fairgrounds,
Longmont

Contact: Jim Wakler, N0XDA, 303-678-9748

April 14th

Aurora Repeater Association (ARA)
Adams County Fairgrounds

Contact: Judy, WD0HNP, 303-450-6910

Or: Janice, KA7TYU,

303-690-1944

\$100 Shopping List Results

Topic	\$	# of Surveys
Antennas	181	10
Emergency Prep	151	7
Packet	145	7
Foxhunt antennas	125	7
Ham Software	97	8
1.2-GHz Repeaters	145	5
GPS Operation	85	7
2-meter SSB	75	7
Low-profile antennas	71	7
Spread spectrum comm	82	6
Computer Hardware	87	7
Data Communications	87	5
DX	73	5
Ham Museum(Genova)	70	5
Computer interfacing	82	5
Radio Repair	52	5
Kit building	51	5
APRS	49	5
Survival	60	4
Linked Repeater sys	85	3
Test equipment	46	4
Internet	45	4
6-meter operation	41	4
High speed packet	38	4
Antique equipment	45	3
Radio etiquette	40	3
Grounding	28	4
Supplier directory	35	3
RFI	35	3
Soldering	51	2
Mobile radio installation	25	4
Campouts	45	2
Power supplies	30	3
QRP	26	3
10-10 Net	30	2
Phone patching	30	2
Tower installation	30	2
Hospitality	30	2
EME (moon bounce)	28	2
Satellite	21	2
Tower Climbing	20	2
Foreign licensing	20	2
Contesting	23	1
NCS Procedures	20	1
Propagation	20	1
Special events	20	1
Cross-band intermod	10	2

Balloon launches	15	1
Hamfest shopping	11	1
Amateur TV	10	1
Eimering	10	1
OSCAR	10	1
Traffic	10	1
160 Meters	5	1
Cross-band operation	5	1
Phonetics	5	1
Skywam	0	0
WX Announcements	0	0
Total Lists Returned =	24	

\$100 Spending Spree

by Doug Moloney

As of Christmas Eve, only \$2385 was spent on the brainstorm items by the 24 members who turned in their sheets. Listed in this issue of 0-Beat are the results of the 24 responses. Out of 58 items on the original list, 54 items received at least \$5 and one "other" item, Net Control Procedures, was added with a value of \$20.

So what does this all mean? It means there are a lot of varied interests in our club. Now the fun begins! From this list will come a list of items for which I will solicit speakers. Some items on the list will be better covered by articles in 0-Beat and I will be soliciting authors. Still others may be great projects for all interested club members to actually do.

I have also solicited names of those who would like to present a topic or topics; Butch, KA0VWT, came forward on two topics and Jake, N0CYR, came forward on a topic. Thanks Butch and Jake.

What about the other 216 members that didn't turn in their sheets? Well, I would still like to get them and add

those numbers to the present results. However, I am going to start planning the first few of this year's programs based on the numbers I have so far and if the trend changes significantly by adding the rest of the numbers, we will have a couple of months at the end of the year to possibly accommodate these changes. Otherwise, we have next year!

So, bring your shopping list with you to the January club meeting or, if you can't make it, contact me and we can figure out how to get it from you.

73, Doug/WBØMHP

Home-brew, but don't drink it! by Doug Moloney, WBØMHP

January's club meeting program will be our annual home-brew night with a couple of new twists. There will be four categories this year: professional kit, non-professional kit, professional non-kit and non-professional non-kit.

What does professional mean? Well for home-brew night it means anyone working in electronics and/or computers as a technician or engineer.

What is a non-professional? Everyone else. For example, domestic engineers, truck drivers, nurses, or English teachers are non-professionals for the sake of the home-brew competition even though they ARE professionals in their fields.

Another new twist is that competition is NOT limited to what has been built this year, past years projects are eligible too. Because there are a lot

of new club members and new hams, this is an excellent time to show the diversity of ham radio as well as the creativity, manual dexterity, and about 14 dozen other attributes of hams.

For those who like the competitive spirit of home-brew night, the board members not entering a project will choose the finalists in each category described above. Then each finalist will be asked to describe their project to the members, who will then decide the first- and second-place winners in each category. First-place winners will receive \$15 cash and second-place winners will receive \$5 cash.

So bring those transmitters using beer-bottle triodes, receivers using penta-grid converters, those "it used to be a ..., now it's a ...", or whatever else you have built, re-built, constructed, redesigned, or touched in some way. The only restriction is that it must be something used for ham radio or ham radio related activity.

73, Doug/WBØMHP

Christmas Party Notes...

"Thank you", "Great party", these are just a couple of compliments said to us as people left the PPRAA Christmas party.

The DAV Auxilliary served an excellent meal and the DAV Commander and his helpers did an outstanding job decorating. All of this added to the festive occasion. We thank all who helped as well as all who attended.

Rosie, WAØMNL

P.S. In other news, Doug, N4TGO, and Mono NØOPH, and family who have been living in Germany (where Doug has been stationed with the military) send greetings to their friends here. They will be returning to the Springs in late Summer, when Doug will once again be stationed here....

Excerpts from Amateur Radio Newslines #957 17 December 1995

Form 610-V

A form many amateur radio operators have been anxiously awaiting, Form 610V is now available. 610V is the application for Vanity call signs. In response to requests by radio amateurs, the American Radio Relay League has mailed 9,000 copies of the form. If you requested one from the League and don't receive it by December 16th, call area code (860) 594-0300. There is one big catch to the new form's availability. While you can obtain a copy, you still can't turn it in, that's because the FCC is not yet accepting 610Vs for filing. The Commission is expected to announce opening dates for the first vanity call sign filing gate in early 1996. You can obtain FCC Form 610V, along with FCC vanity call sign information fact sheet PR-9000 number 206V by writing to the ARRL. The League's address is 225 Main Street, Newington, Connecticut 06111. Be sure to include a self addressed stamped envelope. You can also obtain Form 610V from the Internet at <http://www.FCC.gov/forms/form610V>. The Commission's Forms Distribution center will accept orders

in about a month, you can call the center at 1 800 418-3676.

FCC Book On The Internet

The FCC Interference Handbook now is available on the Internet. The 22 page booklet, available from the Compliance and Information Bureau via the FCC World Wide Web home page, includes the same information and illustrations contained in the recently published Interference to Home Electronic Entertainment Equipment Handbook. It includes information about equipment installation, identifying interference sources, curing interference problems, and filters. You'll also find a list of home electronic equipment manufacturers and telephone numbers. Pictures illustrate different TV Interference problems, including ham or CB transmitter interference.

North Texas Balloon Project

Has the North Texas high altitude ham radio balloon project come to an end? Doug Howard, KG5OA says via the Internet that it's unclear if or when another amateur radio balloon will be launched by the group. Doug says it appears the interest level has declined to a point where the project may indeed be complete. He notes that there is still a substantial audience around the country for the project, but adds that it takes a large, committed effort from a big group of people to actually make a mission succeed. Maybe we'll launch again, Howard says, maybe not.

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Top Twenty Engineering Definitions

1. A number of different approaches are being tried - We're still guessing.
2. An extensive effort is being prepared for a fresh approach to the problem - We just hired three kids right out of college.
3. Close project coordination - We know who to blame.
4. A major technological breakthrough - We're not sure yet why it works.
5. Customer satisfaction is assured on delivery - We are so far behind schedule the customer will be happy to get it delivered.
6. Preliminary operational tests were inconclusive - The darn thing blew up when we turned it on.
7. Test results were extremely gratifying - It didn't blow up when turned on.
8. The entire concept will have to be abandoned - The only person who understood the thing quit.
9. It's still in process - It's so wrapped up in red tape that the situation is hopeless.
10. We'll look into it - Forget it! We have enough problems for now.
11. Please read and initial - Let's spread responsibility around for the screw up.
12. Give us the benefit of your thinking - We'll listen to what you have to say as long as it doesn't

interfere with what we've already done.

13. Give us your interpretation - I Can't wait to hear this baloney . . .
14. See me, let's discuss it - Come into my office, I'm lonely.
15. All new - Parts are not interchangeable with the previous design.
16. Rugged - Too heavy to lift.
17. Lightweight - Lighter than rugged.
18. Years of development - One finally worked.
19. Energy saving - Savings are achieved when the power switch is off.
20. Low maintenance - Impossible to fix if broken.

HUMOR: Today's lesson

The beguiling ideas about science quoted here were gleaned from essays, exams, and classroom discussions. Most were from fifth and sixth graders. They illustrate Mark Twain's contention that the "most interesting information comes from children, for they tell all they know and then stop."

Question: What is one horsepower?
Answer: One horsepower is the amount of energy it takes to drag a horse 500 feet in one second.
You can listen to thunder after lightning and tell how close you came to getting hit. If you don't hear it, you got hit, so never mind.

Talc is found on rocks and on babies.

The law of gravity says no fair jumping up without coming back down.

When they broke open molecules, they found they were only stuffed with atoms.

But when they broke open atoms, they found them stuffed with explosions.

When people run around and around in circles we say they are crazy. When planets do it we say they are orbiting.

Rainbows are just to look at, not to really understand.

While the earth seems to be knowingly keeping its distance from the sun, it is really only centrifuging. Someday we may discover how to make magnets that can point in any direction.

South America has cold summers and hot winters, but somehow they still manage.

Most books now say our sun is a star. But it still knows how to change back into a sun in the daytime.

Water freezes at 32 degrees and boils at 212 degrees. There are 180 degrees between freezing and boiling because there are 180 degrees between north and south.

A vibration is a motion that cannot make up its mind which way it wants to go.

There are 26 vitamins in all, but some of the letters are yet to be discovered. Finding them all means living forever.

There is a tremendous weight pushing down on the center of the Earth because of so much population stomping around up there these days.

Many dead animals in the past changed to fossils while others preferred to be oil.

Genetics explain why you look like your father, and if you don't, why you should.

Vacuums are nothings. We only mention them to let them know we know they're there.

Some oxygen molecules help fires burn while others help make water, so sometimes it's brother against brother.

Some people can tell what time it is by looking at the sun. But I have never been able to make out the numbers.

We say the cause of perfume disappearing is evaporation. Evaporation gets blamed for a lot of things people forget to put the top on.

To most people solutions mean finding the answers. But to chemists solutions are things that are still all mixed up.

In looking at a drop of water under a microscope, we find there are twice as many H's as O's.

Clouds are high flying fogs.

I am not sure how clouds get formed. But the clouds know how to do it, and that is the important thing.

Clouds just keep circling the Earth around and around and around. There is not much else for them to do.

Water vapor gets together in a cloud. When it is big enough to be called a drop, it does.

Humidity is the experience of looking for air and finding water.

We keep track of the humidity in the air so we won't drown when we breathe.

Rain is often known as soft water, oppositely known as hail.

Rain is saved up in cloud banks.

In some rocks you can find the fossil footprints of fishes.

Cyanide is so poisonous that one drop of it on a dog's tongue will kill the strongest man.

A blizzard is when it snows sideways.

A hurricane is a breeze of a bigly size.

A monsoon is a French gentleman.

Thunder is a rich source of loudness. Isotherms and isobars are even more important than their names sound.

It is so hot in some places that the people there have to live in other places.

The wind is like the air, only pushier.

What If People Bought Cars Like They Buy Computers?

HelpLine: "GM HelpLine, how can I help you?"

Customer: "I got in my car and closed the door and nothing happened!"

HelpLine: "Did you put the key in the ignition slot and turn it?"

Customer: "What's an ignition?"

HelpLine: "It's a starter motor that draws current from your battery and turns over the engine."

Customer: "Ignition? Motor? Battery? Engine? How come I have to know all these technical terms just to use my car?"

HelpLine: "GM HelpLine, how can I help you?"

Customer: "My car ran fine for a week and now it won't go anywhere!"

HelpLine: "Is the gas tank empty?"

Customer: "Huh? How do I know?"

HelpLine: "There's a little gauge on the front panel with a needle and markings from 'E' to 'F'. Where is the needle pointing?"

Customer: "It's pointing to 'E'. What does that mean?"

HelpLine: "It means you have to visit a gasoline vendor and purchase some more gasoline. You can install

it yourself or pay the vendor to install it for you."

Customer: "What? I paid \$12,000 this car! Now you tell me that I have to keep buying more components? I want a car that comes with everything built in!"

HelpLine: "GM HelpLine, how can I help you?"

Customer: "Your cars suck!"

HelpLine: "What's wrong?"

Customer: "It crashed, that's what wrong!"

HelpLine: "What were you doing?"

Customer: "I wanted to run faster, so I pushed the accelerator pedal all the way to the floor. It worked for a while and then it crashed and it won't start now!"

HelpLine: "It's your responsibility if you misuse the product. What do you expect us to do about it?"

Customer: "I want you to send me one of the latest version that doesn't sh any more!"

HelpLine: "GM HelpLine, how can I help you?"

Customer: "Hi, I just bought my first car, and I chose your car because it has an automatic transmission, cruise control, power steering, power brakes, and power door locks."

HelpLine: "Thanks for buying our car. How can I help you?"

Customer: "How do I work it?"

HelpLine: "Do you know how to drive?"

Customer: "Do I know how to what?"

HelpLine: "Do you know how to drive?"

Customer: "I'm not a technical person. I just want to go places in my car!"



Difs and Bifs

Estate Sale (K4UBU):

Kenwood TH415A HT (440 mHz) \$160

Kenwood TH25AT HT (2m) \$135

2m glass mount antenna \$20

440 mHz glass mount antenna \$20

Bearcat 20/20 scanner \$60

George WB0DUM 495-3983

For Sale:

Azden PCS-5000 2m mobile w/Tone \$225

Drake TR-72 crystal controlled, several crystals installed - excellent for packet \$75

George WB0DUM 495-3983

For Sale:

Kenwood TS440S

Icom IC-25A

Frank KL7IPV 597-2408

Editor's Notes

As you can see, the Q-Beat has the beginnings of a new look! I decided to try a three-column layout because I found out by looking at past issues of the Q-Beat that it was that way in the past. Do you like it? Or, do you prefer that the layout stays at two columns? Let me know! (This is your newsletter, remember.)

Thanks, and 73,

Jeff Boyes, N0JLH

Attention all members!

Are you currently storing any Association property? If so, the PPRAA property custodian, Mike Stansberry K0TER, wants to know about it. Please give Mike a list of the property you are storing, as well as condition of the equipment.



Jm/YL LUNCH BUNCH

The next Lunch Bunch meeting will be January 18th at the HomeTown Buffet at Noon. HomeTown Buffet is located in The Shops At The Bluffs, 3650 Austin Bluffs Parkway.

We have a fun time at our get-togethers and everyone is cordially invited...you buy your own lunch...relax...visit and enjoy the company of some mighty nice people. See ya there!

73,

Rosie Calaway, WA0MNL
471-9965

This space could be yours!!



Remember this is your club's newsletter and with everyone working together we can make it the best yet.

Are you interested in building your own equipment?

Are you interested in creating a homebrewers group? If so, contact: Scott KB0SLG 579-0571 or Carlos KB0REI 632-1569



APRS In Space!

The University of Maryland Amateur Radio Association (W3EAX), with help from NASA and other volunteer engineers, has developed special software called APRtrak (tm) to track stations and objects on a global scale using satellites. Many packet radio operators are quite familiar with the Automated Packet Reporting System (APRS) whereby packet stations beacon their latitude and longitude. Packet stations monitoring these beacons receive the lat/long information, feed it to the APRS software and graphically display the position of the beaconing station on a map of a state, region, or city.

The APRtrak (tm) software will initially be used to support a space shuttle experiment called SPARTAN Packet Radio Experiment (SPRE). SPRE will be launched as an experiment on board Endeavour (STS-72) scheduled for January 11-20, 1996. During the

experiment, a small cube-shaped satellite will be released via the robot arm on the shuttle. The satellite will operate for about 48 hours after which it'll be retrieved to be returned to Earth.

The APRtrak (tm) software works similarly to APRS, but receives lat/long information from the SPRE satellite! Participating beaconing stations transmit their position to the satellite and the satellite will broadcast the location to any other station within range of the satellite. APRtrak (tm) uses detailed color maps for selected regions for the displays.

The University of Maryland has speculated on numerous applications, both commercial and amateur, for this technology. Can you imagine the possibilities of tracking objects using satellites? It could be used for tracking storms, weather balloons, ships at sea, and people or vehicles on the ground. The possibilities are endless!

Officially, the SPARTAN mission objectives:

- Promote amateur radio and amateur satellite communications.
- Test GPS and packet radio based tracking system using a Low Earth Orbit (LEO) satellite.
- Provide an educational tool to inspire elementary and high school students to pursue science and engineering.
- Provide a unique hands-on educational opportunity for college students.
- Provide telemetry for the REFLEX with a command uplink capability.

The APRtrak (tm) software (673 KB) is currently available free of charge via the Internet at the URL "<http://w3eax.umd.edu>". This web page also includes block diagrams of the SPRE and some more text information.

If you're interested in participating, contact the SPRE Project for more information and the APRtrak (tm) software. Send e-mail to Ken McCaughey at kenneth@w3eax.umd.edu. Or send a self addressed stamped envelope and a 3.5 inch high density floppy disk to:

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**HAPPY
New Year!**



EL PASO COUNTY ROUND TABLES

VHF Round Table - Tuesday evenings at 7:30 p.m. local time on 146.58 MHz.

HF Round Table - Sunday evenings at 7:30 p.m. local time on 3990.5 kHz.

Everyone is invited to join in the fun.

Fox Hunt!

Join in the fun the second Sunday of each month at 4:00 p.m. two miles east of Castle Rock. Meet at the Lutheran Church parking lot 1.5 miles south of Hwy. 86 on Ridge Road. Talk-in: 147.555 MHz simplex.

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Please note: Please submit a completed application form along with your check to the treasurer. This applies to new membership as well as renewals. Thank you.